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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,354	10/10/2003	Michael Chen	BPCUR0006MC (C-40)	1202
27939	7590	11/16/2011	EXAMINER	
PHILIP H. BURRUS, IV 460 Grant Street SE Atlanta, GA 30312				THOMAS, JASON M
ART UNIT		PAPER NUMBER		
2423				
MAIL DATE		DELIVERY MODE		
11/16/2011		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/685,354	CHEN, MICHAEL
	<b>Examiner</b>	<b>Art Unit</b>
	JASON THOMAS	2423

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1)  Responsive to communication(s) filed on 01 August 2011.
- 2a)  This action is **FINAL**.                            2b)  This action is non-final.
- 3)  An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 5)  Claim(s) 1-66 is/are pending in the application.
  - 5a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 6)  Claim(s) \_\_\_\_\_ is/are allowed.
- 7)  Claim(s) 1-66 is/are rejected.
- 8)  Claim(s) \_\_\_\_\_ is/are objected to.
- 9)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 10)  The specification is objected to by the Examiner.
- 11)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 13)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All    b)  Some \* c)  None of:
    1.  Certified copies of the priority documents have been received.
    2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date. _____ .	6) <input type="checkbox"/> Other: _____ .

## DETAILED ACTION

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-66 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al., (U.S. Pub. No. 2003/0028879 A1) in view of Nadan, (U.S. Pat. No. 5,321,750), Chen, (U.S. Pat. No. 6,141,442).

**Regarding claims 1 and 19:** Gordon discloses a method and apparatus for preparing at least a first image for integration with at least a second image, comprising: receiving at least the first image 1004 (where a video is a sequence of image frames) via an input 216 (where the encoder inherently has an input); and an encoder 216 for forming a first compressed image by representing at least one segment of the first image with a reference to another segment of the first image (see e.g. [0050-52] for the use of slice-based, predictive encoding where macroblocks read on segments) thereby preparing the first compressed image for

integration with at least the second image (see e.g. [figs. 2, 4, 11, 24], [0161-165] for preparing for integration) but does not teach converting from analog to digital or wherein only a portion of a first image area is used such that it precludes compression of portions of the first image complementary to the portion.

Nadan teaches converting an analog signal to digital (see e.g. [col. 12, ll. 1-17], [claim 134]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Gordon, by providing analog to digital conversion, as taught by Nadan, in order to benefit from the compression and processing features of digital encoding.

Nadan however does not teach wherein only a portion of a first image area is used such that it precludes compression of portions of the first image complementary to the portion. Chen teaches isolating portions of a first image by performing specialized coding on only a portion of an image, referred to as segmented regions, and precluding said coding on portions complementary to the portions of interest (see e.g. [figs. 2, 4-8, 11, 13, 14], [abstract], [cols. 2-3, ll. 59-3], [cols. 4, 18-14], [col. 7, ll. 8-48] for subject regions and non-subject regions, which read on a portion of the first image complementary to the portion, where only a specified region is selected). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the way in which images are captured and presented on a display, by only capturing and encoding special image regions from an image frame, as taught by Chen, in order to provide a

means of isolating only the desired image portions which are necessary for encoding and later viewing, while also reducing the amount of frame data being transmitted.

**Regarding claim 2:** The combined teachings of the aforementioned art teach further comprising preparing at least the second image for integration with at least the first image by: receiving at least the second image (see e.g. [figs. 2, 11]), and where the first image comprises an analog image, converting the analog image to a second digital image (see e.g. Nadan [col. 12, ll. 1-17], [claim 134] for converting to digital; see also e.g. Gordon [fig. 4, item 406], [fig. 24], [fig. 32] for a compositor/combiner used for integrating).

**Regarding claim 3:** The combined teachings of the aforementioned art teach wherein the second compressed image is formed from restricted to a second portion of a second image area by representing at least one segment of the second image within the second portion with a reference to another segment of the second image within the second portion, thereby preparing the second compressed image for integration with the first compressed image (see e.g. Gordon [figs. 2, 11] for a second image; e.g. Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for image portions of an image area; see also e.g. Gordon [0050], [0052], [0077] for teaching sliced based encoding such that the image is broken into a number of macro blocks).

**Regarding claim 4:** The combined teachings of the aforementioned art teach wherein the first image area and the second image area are the same, and the first portion and the second portion are different portions within the same image area

(see e.g. Gordon [0052] for sliced based encoding; see also e.g. Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] where image regions to be captured are indefinite and can be ).

**Regarding claim 5:** The combined teachings of the aforementioned art teach wherein the first image area and the second image area are different, and the portion and the second region portion are different portions within different image areas (see e.g. Gordon [0052] for sliced based encoding; see also e.g. Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for various configurations to generate portions of a first and second image).

**Regarding claim 6:** The combined teachings of the aforementioned art teach wherein the portion comprises one or more slices of the first image (see e.g. Gordon [0052] for sliced based encoding; see also e.g. Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for various configurations to generate portions of a first and second image).

**Regarding claim 7:** The combined teachings of the aforementioned art teach wherein the second portion comprises one or more slices of the second image (see e.g. Gordon [0052] for sliced based encoding; see also e.g. Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for various configurations to generate portions of a first and second image).

**Regarding claim 8:** The combined teachings of the aforementioned art teach further comprising combining the first compressed image and the second compressed image by interleaving the portion and the second portion (see e.g.

Gordon [0052] for sliced based encoding; see also e.g. [fig. 4, item 406], [fig. 24], [fig. 32] for a compositor/combiner used for integrating; see also e.g. Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for various configurations to generate portions of a first and second image).

**Regarding claim 9:** The combined teachings of the aforementioned art teach wherein at least one of the first image or the second image includes at least one frame (see e.g. Gordon [0052], [0073] for using at least one frame).

**Regarding claim 10:** The combined teachings of the aforementioned art teach wherein the first image area spans at least one frame, and the step of forming the first compressed image includes representing at least one segment of the first image within the portion of the frame with a reference to another segment of the first image within the portion of the frame (see e.g. Gordon [0052], [0073] where working with frames is inherent to applying such a process when working with video and for sliced based encoding; see also Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for variations in obtaining portions and their placement).

**Regarding claim 11:** The combined teachings of the aforementioned art teach wherein the second image area spans at least one frame, and the step of forming the second compressed image includes representing at least one segment of the second image within the second portion of the frame with a reference to another segment of the second image within the second portion of the frame (see e.g. Gordon [0052], [0073] where working with frames is inherent to applying such a process when working with video and for sliced based encoding; see also Chen

[figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for variations in obtaining portions and their placement).

**Regarding claim 12:** The combined teachings of the aforementioned art teach, wherein the first image area spans multiple frames, and the step of forming the first compressed image includes representing at least one segment of the first image within the region portion of one frame with a reference to a segment of the first image within the region portion of a different frame (see e.g. Gordon [0052], [0073] where working with frames is inherent to applying such a process when working with video and for sliced based encoding; see also Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for variations in obtaining portions and their placement).

**Regarding claim 13:** The combined teachings of the aforementioned art teach wherein the second image area spans multiple frames, and step of forming the second compressed image includes representing at least one segment of the second image within the second portion of one frame with a reference to a segment of the second image within the second portion of a different frame (see e.g. Gordon [0052], [0073] where working with frames is inherent to applying such a process when working with video and for sliced based encoding; see also Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for variations in obtaining portions and their placement).

**Regarding claim 14:** The combined teachings of the aforementioned art teach wherein the first image includes a still image, and the second image includes a

motion video image, a still image, or a combination of both (see Gordon [figs. 1, 11], [0072] where the first image can be a menu guide, a still image, and the second image is a video, still, graphic etc.).

**Regarding claim 15:** The combined teachings of the aforementioned art teach wherein the first image is a barker (see Gordon [0056] for a barker).

**Regarding claim 16:** The combined teachings of the aforementioned art teach wherein the second image is a menu or programming guide (see Gordon [fig. 1, 11], [0056] for an IPG).

**Regarding claim 17:** The combined teachings of the aforementioned art teach wherein at least the first image is prepared for integration with at least the second image for display to a content-on-demand subscriber (see Gordon [0056], [0175] for providing such integrated video for a VOD subscriber which reads on content on demand).

**Regarding claim 18:** The combined teachings of the aforementioned art teach wherein the first compressed image is combined with the second image to form an integrated image (see e.g. Gordon [0052] for sliced based encoding; see also e.g. [fig. 4, item 406], [fig. 24], [fig. 32] for a compositor/combiner used for integrating; see also e.g. Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for various configurations to generate portions of a first and second image).

**Regarding claim 20:** The combined teachings of the aforementioned art teach further comprising an input for receiving at least the second image, wherein the encoder forms a second compressed image (see e.g. Gordon [0052] for sliced

based encoding using an encoder; see also e.g. [fig. 4, item 406], [fig. 24], [fig. 32] for a compositor/combiner used for integrating; see also e.g. Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for various configurations to generate portions of a first and second image).

**Regarding claim 21:** The combined teachings of the aforementioned art teach wherein the second compressed image is formed from a second portion of a second image area by representing at least one segment of the second image within the second region portion with a reference to another segment of the second image within the second region portion, thereby preparing the second compressed image for integration with the first compressed image (see e.g. Gordon [figs. 2, 4, 11, 24], [0161-165] for preparing for integration; see also e.g. Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for various configurations to generate portions of a first and second image).

**Regarding claim 22:** The combined teachings of the aforementioned art teach wherein the first image area and the second image area are the same, and the portion and the second region portion are different regions within the same image area (see e.g. Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for various configurations to generate and place portions of a first and second image).

**Regarding claim 23:** The combined teachings of the aforementioned art teach wherein the first image area and the second image area are different, and the portion and the second region portion are different regions within different image

areas (see e.g. Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for various configurations to generate portions of a first and second image).

**Regarding claim 24:** The combined teachings of the aforementioned art teach wherein the first image is logically or physically divided into slices (see Gordon [0052], [0055] for sliced based encoding).

**Regarding claim 25:** The combined teachings of the aforementioned art teach wherein the second image is logically or physically divided into slices (see Gordon [0052], [0055] for sliced based encoding).

**Regarding claim 26:** The combined teachings of the aforementioned art teach wherein the first compressed image is combined with the second compressed image by interleaving first image includes at least one frame (see e.g. Gordon [0052] for sliced based encoding; see also e.g. [fig. 4, item 406], [fig. 24], [fig. 32] for a compositor/combiner used for integrating; see also e.g. Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for various configurations to generate portions of a first and second image).

**Regarding claim 27:** The combined teachings of the aforementioned art teach wherein one or more of the first image or the second image includes at least one frame (see e.g. Gordon [0052], [0073] where working with frames is inherent to applying such a process when working with video and for sliced based encoding).

**Regarding claim 28:** The combined teachings of the aforementioned art teach wherein the first image area spans at least one frame, and the encoder forms the first compressed image by representing at least one segment of the first image

within the portion of the frame with a reference to another segment of the first image within the region portion of the frame (see e.g. Gordon [0052], [0073] where working with frames is inherent to applying such a process when working with video and for sliced based encoding; see also Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for variations in obtaining portions and their placement).

**Regarding claim 29:** The combined teachings of the aforementioned art teach wherein the second image area spans at least one frame, and the encoder forms the second compressed image by representing at least one segment of the second image within the second region portion of the frame with a reference to another segment of the second image within the second region portion of the frame (see e.g. Gordon [0052], [0073] where working with frames is inherent to applying such a process when working with video and for sliced based encoding; see also Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for variations in obtaining portions and their placement).

**Regarding claim 30:** The combined teachings of the aforementioned art teach wherein the first image area spans multiple frames, and the encoder forms the first compressed image by representing at least one segment of the first image within the portion of one frame with a reference to a segment of the first image within the region portion of a different frame (see e.g. Gordon [0052], [0073] where working with frames is inherent to applying such a process when working with video and for sliced based encoding; see also Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for variations in obtaining portions and their placement).

**Regarding claim 31:** The combined teachings of the aforementioned art teach wherein the second image area spans multiple frames, and the encoder forms the second compressed image by representing at least one segment of the second image within the second region portion of one frame with a reference to a segment of the second image within the second region portion of a different frame (see e.g. Gordon [0052], [0073] where working with frames is inherent to applying such a process when working with video and for sliced based encoding; see also Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for variations in obtaining portions and their placement).

**Regarding claim 32:** The combined teachings of the aforementioned art teach wherein the first image is a motion video image, and the second image is a still image, a motion video image, or a combination of both (see e.g. Gordon [fig. 1, 11], [0056], [0072] where the first image can be a menu guide, a still image, and the second image is a video).

**Regarding claim 33:** The combined teachings of the aforementioned art teach wherein the first image is a barker (see e.g. Gordon [0056] for a barker).

**Regarding claim 34:** The combined teachings of the aforementioned art teach wherein the second image is a menu or programming guide (see e.g. Gordon [fig. 1, 2, 11], [0056] for an IPG).

**Regarding claim 35:** The combined teachings of the aforementioned art teach wherein at least the first image is prepared for integration with at least the second image for display to a content-on-demand subscriber (see Gordon [0056],

[0175] for providing such integrated video for a VOD subscriber which reads on content on demand).

**Regarding claim 36:** The combined teachings of the aforementioned art teach wherein the first compressed image is combined with the second image to form an integrated image by interleaving the first image with the second image (see e.g. Gordon [0052] for sliced based encoding; see also e.g. [fig. 4, item 406], [fig. 24], [fig. 32] for a compositor/combiner used for integrating; see also e.g. Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for various configurations to generate portions of a first and second image).

2. Claims 37-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon in view of Chen.

**Regarding claims 37:** Gordon discloses a system for preparing at least a first image, wherein the first image is a digital image, for integration with at least a second image, comprising: a receiver for receiving at least the first image 1004 (where a video is a sequence of image frames) via an receiver 216 (where the encoder receives the image); and at least a first encoder 216 for forming a first compressed image by representing at least one segment of the first image with a reference to another segment of the first image (see e.g. [0050-52] for the use of slice-based, predictive encoding where macroblocks read on segments) thereby preparing the first compressed image for integration with at least the second image (see e.g. [figs. 2, 4, 11, 24], [0161-165] for preparing for integration) but does not

teach wherein only a portion of a first image area is used such that it precludes compression of portions of the first image complementary to the portion.

Chen teaches isolating portions of a first image by performing specialized coding on only a portion of an image, referred to as segmented regions, and precluding said coding on portions complementary to the portions of interest (see e.g. [figs. 2, 4-8, 11, 13, 14], [abstract], [cols. 2-3, ll. 59-3], [cols. 4, 18-14], [col. 7, ll. 8-48] for subject regions and non-subject regions, which read on a portion of the first image complementary to the portion, where only a specified region is selected). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the way in which images are captured and presented on a display, by only capturing and encoding special image regions from an image frame, as taught by Chen, in order to provide a means of isolating only the desired image portions which are necessary for encoding and later viewing, while also reducing the amount of frame data being transmitted.

**Regarding claims 55, 59 and 63:** Gordon discloses a method, apparatus and system for integrating at least a first image and at least a second image: at least a first encoder 216 for receiving the first image 1004 (i.e. where the image is digital) and forming a first compressed image by representing at least one segment of the first image with a reference to another segment of the first image (see e.g. [0050-52] for the use of slice-based, predictive encoding where macroblocks read on segments); and a combiner for combining the first compressed image and the second image to form an integrated image (see e.g. [fig. 4, item 406], [fig. 24], [fig.

32] for a compositor/combiner) but does not teach wherein only a portion of a first image area is used such that it precludes compression of portions of the first image complementary to the portion.

Chen teaches isolating portions of a first image by performing specialized coding on only a portion of an image, referred to as segmented regions, and precluding said coding on portions complementary to the portions of interest (see e.g. [figs. 2, 4-8, 11, 13, 14], [abstract], [cols. 2-3, ll. 59-3], [cols. 4, 18-14], [col. 7, ll. 8-48] for subject regions and non-subject regions, which read on a portion of the first image complementary to the portion, where only a specified region is selected). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the way in which images are captured and presented on a display, by only capturing and encoding special image regions from an image frame, as taught by Chen, in order to provide a means of isolating only the desired image portions which are necessary for encoding and later viewing, while also reducing the amount of frame data being transmitted.

**Regarding claim 38:** The combined teachings of the aforementioned art teach further comprising: a receiver for receiving at least a second image; and a second encoder for forming a second compressed image, thereby preparing the second image for integration with the first image (see e.g. Gordon [figs. 2, 11], [0072] for receiving and an encoder for encoding where multiple encoders is anticipated; see also e.g. [figs. 2, 4, 11, 24], [0161-165] for preparing for integration). Therefore, it would have been obvious to one of ordinary skill in the art at the time

the invention was made to modify server 510 by providing more than one encoder, as taught by Gordon, in order to allow each independent signal to have a dedicated encoder to increase the throughput and reduce system congestion.

**Regarding claim 39:** The combined teachings of the aforementioned art teach wherein the second encoder forms the second compressed image from a second region portion of a second image area by representing at least one segment of the second image within the second region portion with a reference to another segment of the second image within the second region portion (see e.g. Gordon [0052], [0055] where working with frames is inherent to applying such a process when working with video and for sliced based encoding; see also [0072] for using more than one encoder).

**Regarding claim 40:** The combined teachings of the aforementioned art teach wherein the first image area and the second image area are the same, and the portion and the second region portion are different regions within the same image area (see Gordon [0052], [0055] for sliced based encoding; see also [figs. 4, 24] for compositing signals; see also Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for a plurality of image portion configurations).

**Regarding claim 41:** The combined teachings of the aforementioned art teach wherein the first image area and the second image area are different, and the portion and the second region portion are different regions within different image areas (see Gordon [0052], [0055] for sliced based encoding; see also [figs. 4, 24] for

compositing signals; see also Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for a plurality of image portion configurations).

**Regarding claim 42:** The combined teachings of the aforementioned art teach wherein the first image is logically or physically divided into segments (see Gordon [0052], [0055] for sliced based encoding which logically/physically divided into segments/macro blocks).

**Regarding claim 43:** The combined teachings of the aforementioned art teach wherein the second image is logically or physically divided into segments (see Gordon [0052], [0055] for sliced based encoding which logically/physically divided into segments/macro blocks).

**Regarding claim 44:** The combined teachings of the aforementioned art teach wherein the first image includes at least one frame (see e.g. Gordon [0052], [0073] where working with frames is inherent to applying such a process when working with video and for sliced based encoding; see also [fig. 11] for multiple images i.e. video 1, 2 or 3).

**Regarding claim 45:** The combined teachings of the aforementioned art teach wherein the second image includes at least one frame (see e.g. Gordon [0052], [0073] where working with frames is inherent to applying such a process when working with video and for sliced based encoding; see also [fig. 11] for multiple images i.e. video 1, 2 or 3).

**Regarding claim 46:** The combined teachings of the aforementioned art teach wherein the first image area spans at least one frame, and the first encoder

forms the first compressed image by representing at least one segment of the first image within the region portion of the frame with a reference to another segment of the first image within the region portion of the frame (see e.g. Gordon [0052], [0073] where working with frames is inherent to applying such a process when working with video and for sliced based encoding; see also Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for variations in obtaining portions and their placement).

**Regarding claim 47:** The combined teachings of the aforementioned art teach wherein the second image area spans at least one frame, and the second encoder forms the second compressed image by representing at least one segment of the second image within the second region portion of the frame with a reference to another segment of the second image within the second region portion of the frame (see e.g. Gordon [0052], [0073] where working with frames is inherent to applying such a process when working with video and for sliced based encoding; see also Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for variations in obtaining portions and their placement).

**Regarding claim 48:** The combined teachings of the aforementioned art teach wherein the first image area spans multiple frames, and the first encoder forms the first compressed image by representing at least one segment of the first image within the region portion of one frame with a reference to a segment of the first image within the region portion of a different frame (see e.g. Gordon [0052], [0073] where working with frames is inherent to applying such a process when working with video and for sliced based encoding; see also Chen [figs. 7, 8], [col. 7,

ll. 8-48], [cols. 10-11, ll. 41-9] for variations in obtaining portions and their placement).

**Regarding claim 49:** The combined teachings of the aforementioned art teach wherein the second image area spans multiple frames, and the second encoder forms the second compressed image by representing at least one segment of the second image within the second region portion of one frame with a reference to a segment of the second image within the second region portion of a different frame (see e.g. Gordon [0052], [0073] where working with frames is inherent to applying such a process when working with video and for sliced based encoding; see also Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for variations in obtaining portions and their placement).

**Regarding claim 50:** The combined teachings of the aforementioned art teach wherein the first image is a motion video image, and the second image is a still image, a motion video image, or a combination of both (see e.g. Gordon [fig. 1, 11], [0056] where the first image can be a menu guide, a still image, and the second image is a video).

**Regarding claim 51:** The combined teachings of the aforementioned art teach wherein the first image is a barker (see e.g. Gordon [figs. 1, 11], [0056] for a barker).

**Regarding claim 52:** The combined teachings of the aforementioned art teach wherein the second image is a menu or programming guide (see e.g. Gordon [figs. 1, 11], [0056] for an IPG).

**Regarding claim 53:** The combined teachings of the aforementioned art teach wherein the first image is prepared for integration with at least the second image for display to a content-on-demand subscriber (see Gordon [0056], [0175] for providing such integrated video for a VOD subscriber which reads on content on demand).

**Regarding claim 54:** The combined teachings of the aforementioned art teach wherein the first compressed image is combined with the second image to form an integrated image (see e.g. Gordon [figs. 2, 4, 11, 24], [0161-165] for preparing for integration using a compositor which integrates images).

**Regarding claim 56:** The combined teachings of the aforementioned art teach further comprising forming a second compressed image, wherein the step of combining combines the second compressed image with the first compressed image (see e.g. Gordon [figs. 2, 4, 11, 24], [0161-165] for preparing for integration using a compositor which integrates images).

**Regarding claim 57:** The combined teachings of the aforementioned art teach wherein the second compressed image is formed, restricted to a second portion of a second image area, by representing at least one segment of the second image within the second portion with a reference to another segment of the second image within the second portion (see e.g. Gordon [fig. 11], [0072] for a second image and multiple encoders; see also [0052], [0055] for teaching sliced based encoding such that the image is broken into a number of macro blocks such that each portion is referenced by start and stop identifiers).

**Regarding claim 58:** The combined teachings of the aforementioned art teach wherein the step of combining comprises selecting first portions of the first compressed image within the first portion, selecting second portions of the second compressed image within the second portion, and combining the selected first portions and second portions (see e.g. Gordon [0052], [0055] for sliced based encoding; see also [fig. 24] for compositing).

**Regarding claim 60:** The combined teachings of the aforementioned art teach wherein the encoder forms a second compressed image, and the combiner combines the second compressed image with the first compressed image (see e.g. Gordon [fig. 24] for a compositor which integrates images).

**Regarding claim 61:** The combined teachings of the aforementioned art teach wherein the second compressed image is formed, from a second portion of a second image area, by representing at least one segment of the second image within the second region portion with a reference to another segment of the second image within the second region portion (see e.g. Gordon [fig. 11] for a second image, see also [0052], [0055]) for teaching sliced based encoding such that the image is broken into a number of macro blocks such that each portion is referenced by start and stop identifiers and then recombined).

**Regarding claim 62:** The combined teachings of the aforementioned art teach wherein the combiner selects first portions of the first compressed image within the portion, selects second portions of the second compressed image within the second region portion, and combines the selected first portions and second

portions (see e.g. Gordon [fig. 11] for a second image, see also [0052], [0055]) for teaching sliced based encoding such that the image is broken into a number of macro blocks such that each portion is referenced by start and stop identifiers and then recombined).

**Regarding claim 64:** The combined teachings of the aforementioned art teach further comprising: at least a second encoder for receiving the second image and forming a second compressed image, wherein the combiner combines the first compressed image and the second compressed image (see e.g. Gordon [figs. 2, 11], [0072] where the use of multiple encoders is anticipated; [0052] for sliced based encoding and frames; see also e.g. [figs. 2, 4, 11, 24], [0161-165] for preparing for integration). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify server 510 by providing more than one encoder, as taught by Gordon, in order to allow each independent signal to have a dedicated encoder to increase the throughput and reduce system congestion.

**Regarding claim 65:** The combined teachings of the aforementioned art teach wherein the second encoder forms the second compressed image, from a second region portion of a second image area, by representing at least one segment of the second image within the second region portion with a reference to another segment of the second image within the second region portion (see e.g. Gordon [figs. 2, 11], [0072] for receiving and an encoder for encoding where multiple encoders is anticipated; [0052] for sliced based encoding and frames; see also e.g. [figs. 2, 4, 11, 24], [0161-165] for preparing for integration; see also e.g. Chen [figs.

7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for the user and placement of image portions).

**Regarding claim 66:** The combined teachings of the aforementioned art teach wherein the combiner selects first portions of the first compressed image within the portion selects second portions of the second compressed image within the region portion, and combines the selected first portions and second portions (see e.g. Gordon [figs. 2, 4, 11, 24], [0161-165] for a compositor for preparing for integration; see also Chen [figs. 7, 8], [col. 7, ll. 8-48], [cols. 10-11, ll. 41-9] for the use and placement of image portions).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Thomas whose telephone number is (571) 270-5080. The examiner can normally be reached on Mon. - Thurs., 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on (571) 272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

J. Thomas

/HAI V. TRAN/

Primary Examiner, Art Unit 2426